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Holly D Kozlowski

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant:	Jean-Francois Bodet et al	Paper No.:	
Serial No.:	09/341,979	Group Art Unit:	1751
Filed:	July 21, 1999	Examiner:	G. R. DelCotto

For: **Detergent Compositions with Improved Physical Stability at Low Temperature**

TRANSMITTAL OF APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Submitted herewith in **triplicate** is an Appeal Brief in support of the Notice of Appeal filed by Certificate of Mailing on March 3, 2004 and received by the U.S. Patent and Trademark Office on March 23, 2004. The government fee in the amount of $330.00 for filing the present Appeal Brief should be charged to our Visa credit card. Form PTO-2038 is enclosed.

Please charge any additional fees required or credit any excess in fees paid in connection with the present communication to Deposit Account No. 04-1133.

Respectfully submitted,

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APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The present Appeal Brief is submitted in support of the Notice of Appeal filed by Certificate of Mail on March 3, 2004 and received by the U.S. Patent and Trademark Office on March 23, 2004.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of the present application, The Procter & Gamble Company.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Appellants, the Appellants' undersigned legal representative or the assignee which will directly effect or be directly effected by or having a bearing on the Board's decision in the present appeal.

III. STATUS OF THE CLAIMS

Claims 12-15 and 17-20 are pending in the present application, stand rejected, and are the subject of the present appeal. Claims 1-11 and 16 have been cancelled. A complete copy of the pending claims is set forth in the Appendix.

IV. STATUS OF AMENDMENT FILED SUBSEQUENT TO FINAL REJECTION

A Request for Reconsideration Under 37 C.F.R. 1.116 was filed subsequent to final rejection, but presented no amendments to the application.

V. SUMMARY OF THE INVENTION

The present invention is directed to aqueous liquid detergent compositions which are particularly useful for washing dishes and which have improved physical stability at low temperature (page 1, lines 4-6). The invention is also directed to methods of washing soiled dishes (claims 19 and 20).

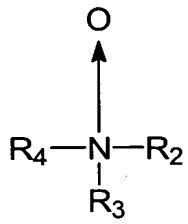
More particularly, according to claim 1, the invention is directed to an aqueous liquid detergent composition comprising from 30% to 70%, by weight of the total composition of water, from 0.1% to 2% by weight of the total composition, of magnesium ions, and a surfactant mixture. The surfactant mixture comprises a) an alkyl alkoxy sulfate surfactant of the formula $R_1O(A)_xSO_3M$, where R_1 is an alkyl or alkenyl group having 9 to 16 carbon atoms, A is an alkoxy group, x represents 0.5 to 3 in average, and M is a member selected from the group consisting of alkali metals, alkali earth metals, ammonium and

alkanolammonium, wherein from 20% to 60% by weight of the total alkyl alkoxy sulfate comprises an alkyl alkoxy sulfate wherein R_1 is branched such that the composition provides sudsing, and b) 0.5 to 10% of an amine oxide surfactant.

Claim 13 recites a composition according to claim 12 which comprises from 40% to 60% by weight water.

Claim 14 recites a composition according to claim 12 wherein the alkyl alkoxy sulfate surfactant comprises from 20% to 55%, by weight, of the branched alkyl alkoxy sulfate surfactant, while claim 15 recites a composition according to claim 14 wherein the alkyl alkoxy sulfate surfactant comprises from 30% to 50%, by weight, of the branched alkyl alkoxy sulfate surfactant.

Claim 17 recites a composition according to claim 12 wherein the amine oxide surfactant is of the formula:



wherein R_2 represents a straight or branched alkyl or alkenyl group having 10 to 16 carbon atoms, and R_3 and R_4 each represent a C_1 to C_4 hydrocarbon chain.

Claim 18 recites a composition according to Claim 12 which is a clear liquid packaged in a transparent container.

Claims 19 and 20 recite methods of washing soiled dishes. According to claim 19, the method comprises diluting a composition according to claim 12 in water, and immersing the soiled dishes in the diluted composition and contacting the soiled dishes, in the presence of the diluted composition, with a washing article such that the soiled dishes are cleaned. According to claim 20, the method comprises immersing the soiled dishes into a water bath,

absorbing an effective amount of a composition according to Claim 12 onto a device, and contacting each of the soiled dishes with the device such that the soiled dishes are cleaned.

VI. ISSUES ON APPEAL

The following issues are presented for review by the Board:

A. The rejection of claims 12-15 and 17-20 under 35 U.S.C. 103(a) as being unpatentable over WO 95/00117 to Surutzidis ("Surutzidis") in view of U.S. Patent No. 5,698,505 to Ofosu-Asante et al ("Ofosu-Asante").

B. The rejection of claims 12-15, 17 and 18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 5,698,505 to Ofosu-Asante.

VII. GROUPING OF THE CLAIMS

With respect to the above-noted issue A on appeal, Appellants submit that claims 14, 15 and 18-20 are independently patentable from claim 12 from which they directly or indirectly depend, and reasons in support of the independent patentability of these claims are set forth below.

With respect to the above-noted issue B on appeal, Appellants submit that claims 14 and 15 are independently patentable from claim 12 from which they directly or indirectly depend, and reasons in support of the independent patentability of these claims are set forth below.

VIII. ARGUMENTS

For the reasons set forth in detail below, Appellants submit that the aqueous liquid detergent compositions and methods of washing soiled dishes defined by claims 12-15 and

17-20 are nonobvious over and patentably distinguishable from the combination of Surutzidis in view of Ofosu-Asante. Moreover, Appellants submit that the aqueous liquid detergent compositions of claims 12-15, 17 and 18 are nonobvious over and patentably distinguishable from claims 1-6 of Ofosu-Asante. Accordingly, the rejection under 35 U.S.C. §103 and the rejection under the judicially created doctrine of obviousness-type double patenting should be reversed. Reconsideration and reversal of the Examiner's rejections by the Board are respectfully requested.

A. The Claims are Nonobvious over Surutzidis in view of Ofosu-Asante

The aqueous liquid detergent compositions defined by claims 12-15, 17 and 18 and the methods of washing soiled dishes defined by claims 19 and 20 are nonobvious over and patentably distinguishable from the combination of Surutzidis and Ofosu-Asante.

1. The Examiner's Rejection

The rejection of the claims under 35 U.S.C. §103 based on Surutzidis in view of Ofosu-Asante was initially made in the Official Action dated December 3, 2003 (page 4). The Examiner merely asserted that the cited Surutzidis et al WO 95/00117 is equivalent to the previously cited Surutzidis et al U.S. Patent No. 5,858,950 and does not teach the use of magnesium ions in addition to the other requisite components of the composition in the specific proportions as recited by the claims. The Examiner asserted it would have been obvious to one of ordinary skill in the art to use magnesium ions in the composition taught by Surutzidis with a reasonable expectation of success because Ofosu-Asante teaches the advantageous grease cutting properties imparted to a similar dishwashing detergent composition when using magnesium ions. In response to Appellants' previous argument that Surutzidis fails to teach both linear and branched alkyl alkoxy sulfate (AAS) in specific proportions, the Examiner asserted that Surutzidis teach the use of branched ethoxylated

sulfate anionic surfactants and primary ethoxylated sulfate surfactants sufficient to suggest the branched and unbranched alkyl ethoxylated sulfate surfactant as claimed.

2. Surutzidis and Ofosu-Asante Fail to Teach or Suggest the Claimed Compositions

The present aqueous liquid detergent compositions, as defined broadly by independent claim 12, comprise from about 30% to 70% by weight water, from 0.1% to 2% by weight magnesium ions, and a surfactant mixture. The surfactant mixture comprises: a) an alkyl alkoxy sulfate ("AAS") surfactant of the formula $R_1O(A)_xSO_3M$, where R_1 is an alkyl or alkenyl group having 9 to 16 carbon atoms, A is an alkoxy group, x represents 0.5 to 3 in average, and M is a member selected from the group consisting of alkali metals, alkali earth metals, ammonium and alkanolammonium, and b) 0.5% to 10% of an amine oxide surfactant. From 20% to 60% by weight of the total AAS comprises an alkyl alkoxy sulfate wherein R_1 is branched such that the composition provides sudsing.

Thus, the instant inventive compositions comprise water, magnesium ions, amine oxide surfactant, and both branched and linear AAS's in specified proportions as required by claim 12, and not merely the presence of AAS's. In fact, the present specification discloses that the combination of amine oxide and AAS is well known in the detergent arts, but conventional compositions containing such combinations are subject to stability problems at low temperatures and typically form an undesirable white precipitate (see the paragraph bridging pages 1 and 2 of the specification). The instant specification further discloses that this problem is exacerbated in compositions comprising cations such as magnesium, and in compositions which are formulated as clear liquids (specification, page 2). Neither Ofosu-Asante nor Surutzidis teach compositions that require both linear and branched AAS's in specific proportions presently claimed, and neither recognize that such a combination of linear and branched AAS's provide a solution to the low-temperature stability problem.

The instantly recited parameter of between 20% and 60% for the branched AAS percentage range is based on the instant inventors' discovery that the sudsing performance of the detergent product deteriorates unacceptably when the percentage of branched AAS's is greater than 60, yet that some minimum amount of branching is required to achieve the desired low temperature stability (specification, page 5, second paragraph). This minimum value is taught to be ascertainable by plotting stability of a given matrix at the desired temperature as a function of the proportion of branched material (specification, page 5, second paragraph), and generally, branched AAS's should be present in amounts of at least 20% by weight of the total AAS (specification, page 5, second paragraph).

The primary reference, Surutzidis, is directed to low sudsing compositions containing branched "Guerbet" surfactants. However, Appellants find no teaching or suggestion by Surutzidis relating to the combination of linear and branched AAS's and amine oxide required by the instantly recited formulations. Additionally, Appellants find no teaching or suggestion by Surutzidis relating to any improvement provided by such a combination. Surutzidis also fails to disclose any exemplar formulations which reflect, either intentionally or inherently, the percentages of branched and linear AAS's and amine oxide required by the instant claims. Surutzidis teaches that, desirably, the branched Guerbet surfactants "are *low* sudsing due to the branching" (emphasis added). In view of the low sudsing property desirable for the Surutzidis compositions, which are intended for laundry and machine dishwashing compositions where suds control is of importance (page 9, last paragraph), one of ordinary skill in the art would not be motivated limit such surfactants or to further provide the branched Guerbet surfactant in combination with linear AAS and amine oxide in the proportions presently claimed.

Further, in the Surutzidis examples on page 10, branched AAS's (second ingredient) are listed separately from the non-alkoxy branched alkyl sulphates (first ingredient), and none

of the examples comprise a combination of both linear and branched AAS's. In fact, only Example E contains branched AAS; however, the percentage of branched AAS in Example E exceeds the presently claimed 60% maximum, since the branched form is the only AAS and thus constitutes virtually 100% of the total AAS's.

Earlier in the prosecution, the Examiner appeared to assert that Example E falls within the scope of the present inventive claims, stating that Surutzidis discloses that the source of this ingredient is Lial®, which the Examiner asserts to be the same as that presently used. Appellants point out, however, that in the present specification, a disclosure of, e.g., 30% branching is arrived at by manipulating proprietary formulations. Surutzidis merely states that the branched C_{12}-C_{15} alkyl 3EO sulphate is a Lial® C_{12}-C_{15} alkyl ethoxy sulphate Na salt *prepared from* the Lial® C_{12}-C_{15} alcohol. Appellants fail to find support for the Examiner's conclusory assertion that when Surutzidis discloses an ingredient as a branched AAS constituting 25% of a detergent composition, a 60% branched AAS constituting 25% of the composition is intended. Any assertion that something other than the plain meaning of 25% of a fully branched component is taught, in the absence of any support, is inappropriate. Lial® is the proprietary name for a large number of alcohols and their derivatives, as well as specially prepared compounds. It is impossible for the Examiner to know the precise compound from the general description provided at page 10, which merely designates the AAS a derivative of a Lial® alcohol. Unless Surutzidis specifically discloses a percentage to the contrary, the plain meaning of Surutzidis's own descriptions of their ingredients govern.

Moreover, the Examiner's contention that it would have been obvious to add the magnesium of Ofosu-Asante to the compositions of Surutzidis in order to achieve the present inventive compositions ignores the fact that Surutzidis is directed to low-sudsing detergents while Ofosu-Asante is directed to high-sudsing liquid or gel dish-washing detergents. Significantly, the present disclosure teaches that one role of magnesium is to *improve* sudsing

(see the present specification at page 6, third paragraph). While the hindsight afforded by the success of the instant inventive compositions comprising magnesium arguably makes it obvious that adding the magnesium to Surutzidis will improve the Surutzidis detergents, there is no suggestion in Surutzidis of the desirability of doing so. In fact, Surutzidis teaches away from high-sudsing and discloses that its compositions are intended for applications which require low-sudsing activity, such as machine washing.

In addition, Ofosu-Asante explicitly teaches that formulating alkaline compositions which comprise divalent ions such as magnesium is difficult due to the incompatibility of the divalent ions, "particularly magnesium," with hydroxide ions (column 6, lines 49-52). Appellants draw attention to Surutzidis at page 10 which discloses that all the exemplar compositions are formulated with the pH adjusted to 7.5-9 with NaOH. Clearly, the compositions of Surutzidis are alkaline and the addition of magnesium is not only non-obvious, but taught as difficult by Ofosu-Asante, without additional formulative modifications. Thus, a person of ordinary skill in the detergent arts would be discouraged from making the asserted combination of Ofosu-Asante and Surtuzidis by the explicit teachings of Ofosu-Asante.

To establish prima facie obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art, *In re Royka*, 490 F.2d at 981, 180 U.S.P.Q. at 580. It is error to find obviousness where references diverge from and teach away from the invention at hand. *In re Fine*, 5 U.S.P.Q.2d at 1599. Since neither reference teaches or suggests both linear and branched AAS's in the instantly specified proportions, the combination does not render the present invention obvious. Further, since the primary reference is directed to composition ingredients which inhibit sudsing, while the secondary reference is directed to compositions which promote sudsing, a combination motivated by similar purpose is not suggested. In addition, the presently claimed combination of

compounds is *explicitly* discouraged by Ofosu-Asante, as the magnesium ions of Ofosu-Asante would cause undesirable storage instability and hydroxide precipitates in the alkaline Surutzidis compositions. Hence, the present inventive compositions are nonobvious over and patentably distinguishable from Surutzidis in view of Ofosu-Asante, whereby the rejection under 35 U.S.C. §103(a) of claims 12-15 and 17-20 should be reversed.

3. Claims 14 and 15 are Further Patentably Distinguishable

Claims 14 and 15 further define the alkyl alkozy sulfate surfactant which is employed in the aqueous liquid detergent composition of claim 12 as comprising from 20% to 55% by weight of the branched alkyl alkoxy sulfate surfactant (claim 14), or as comprising from 30% to 50% by weight of the branched alkyl alkoxy sulfate surfactant (claim 15).

Neither Surutzidis nor Ofosu-Asante teach or suggest such compositions. That is, while Surutzidis discloses that their compositions may contain a branched alkyl alkoxy sulfate compound, Appellants find no teaching or suggestion regarding a composition containing a surfactant mixture of alkyl alkoxy sulfate surfactant and amine oxide surfactant wherein the alkyl alkoxy sulfate surfactant contains both branched and linear alkyl alkoxy sulfate surfactant, and particularly from 20% to 50% by weight of the branched alkyl alkoxylated sulfate surfactant as required by claim 14 or contains from 30% to 50% by weight of the branched alkyl alkoxy sulfate surfactant as required claim 15. The Board's attention is again directed to the discussion in the present specification at page 5 which emphasizes the importance of the claimed range of branched alkyl alkoxylated sulfate material in providing desired low temperature stability in combination with good sudsing performance which, as noted above, is an important consumer perceived indication of efficacy. Not only do Surutzidis and Ofosu-Asante fail to teach or suggest the limitations of claims 14 and 15, Appellants find no teaching or suggestion in these references relating to the improvement in low temperature stability provided without sacrificing sudsing ability,

provided by the claimed compositions. Finally, Surutzidis teach away from the compositions as claimed in the exemplary compositions set forth at page 10 wherein alkyl alkoxy sulfate surfactant containing 100% branching is employed (example E). As noted above, it is error to find obviousness where the prior art diverges from and teaches away from the invention at hand, *In re Fine, supra.*

It is therefore submitted that the compositions defined by claims 14 and 15 are nonobvious over and patentably distinguishable from the combination of Surutzidis and Ofosu-Asante, whereby the rejection under 35 U.S.C. §103 should be reversed.

4. Claim 18 is Further Patentably Distinguishable

Claim 18 is directed to the composition of claim 12, further defined as a clear liquid packaged in a transparent container. Appellants find no teaching or suggestion by Surutzidis which would teach or suggest formulating the low sudsing liquid detergent compositions of Surutzidis as a clear liquid, or packaging such a composition in a transparent container. Moreover, Appellants find no teaching or suggestion in Ofosu-Asante for modifying the compositions of Surutzidis along these lines. On the other hand, because the compositions of the present invention exhibit improved stability, even at low temperatures, they maintain their clear liquid appearance and therefore are advantageously suitable for packaging in a transparent container in order to emphasize the improved stability properties. The limitations of claim 18 are neither taught nor suggested by the cited combination of references. Accordingly, a prima facie case of obviousness has not been established, *In re Royka, supra*, whereby the rejection of claim 18 under 35 U.S.C. §103 should be reversed.

5. Claims 19 and 20 are Independently Patentable

Claims 19 and 20 are directed to methods of washing soiled dishes. According to claim 19, a composition according to claim 12 is diluted in water, and soiled dishes are immersed in the diluted composition. The soiled dishes are contacted with a washing article

in the presence of the diluted composition such that the soiled dishes are cleaned. According to claim 20, soiled dishes are immersed in a water bath, an effective amount of a composition according to claim 12 is absorbed onto a device and the soiled dishes are contacted with the device such that the soiled dishes are cleaned.

Thus, each of claims 19 and 20 are directed to methods of washing soiled dishes wherein, typically, suds will be generated. In contrast, Surutzidis discloses low sudsing compositions suitable for machine washing processes in which it is undesirable to generate suds. Not only do Appellants fail to find any teaching or suggestion by Surutzidis relating to compositions as defined in claim 12, Appellants find no teaching or suggestion by Surutzidis relating to methods of washing soiled dishes comprising steps as recited in either claim 19 or claim 20, or any other washing method wherein suds are desirably generated.

Moreover, the deficiencies of Surutzidis are not resolved by Ofosu-Asante. While the Ofosu-Asante compositions are desirably high sudsing, Appellants find no teaching or suggestion by Ofosu-Asante for using the compositions of Surutzidis in a method of washing soiled dishes, particularly comprising the combination of steps recited in either of claim 19 or claim 20.

Thus, the methods of claims 19 and 20 are further patentably distinguishable from Surutzidis in view of Ofosu-Asante, whereby the rejection of these claims under 35 U.S.C. §103 should be reversed.

B. The Claims are Nonobvious Over the Ofosu-Asante Claims

The aqueous liquid detergent compositions defined by claims 12-15, 17 and 18 are nonobvious over and patentably distinguishable from the Ofosu-Asante claims, whereby the rejection under the judicially created doctrine of obviousness-type double patenting should be reversed.

1. The Examiner's Rejection

The Examiner asserted that although the present claims 12-15, 17 and 18 are not identical with claims 1-6 of Ofosu-Asante, they are not patentably distinct because claims 1-6 are Ofosu-Asante in combination with Surutzidis encompass the material limitations of the present claims.

2. The Ofosu-Asante Claims Fail to Teach or Suggest the Claimed Compositions

As discussed above, independent claim 12 is directed to detergent compositions comprising, inter alia, from 0.1% to 2% magnesium ions by weight, and a surfactant mixture. The surfactant mixture comprises: a) an AAS surfactant of the formula $R_1O(A)_xSO_3M$, where R_1 is an alkyl or alkenyl group having 9 to 16 carbon atoms, A is an alkoxy group, x represents 0.5 to 3 in average, and M is a member selected from the group consisting of alkali metals, alkali earth metals, ammonium and alkanolammonium, and b) 0.5% to 10% of an amine oxide surfactant. From 20% to 60% by weight of the total AAS comprises an alkyl alkoxy sulfate wherein R_1 is branched such that the composition provides sudsing.

On the other hand, Ofosu-Asante claim a high sudsing, spontaneous grease-emulsifying light-duty liquid or gel dishwashing detergent composition consisting essentially of, by weight, from about 10% to about 70% of detergent surfactant, from about 8% to about 25% of a C_{12} to C_{16} amine oxide, with an amine oxide to detergent surfactant ratio in the range of from 2:1 to about 1:3, and optionally from about 1% to about 10% suds booster, from about 0.001% to about 5% of active enzyme, and from about 0.01% to about 4% magnesium or calcium ions or mixtures thereof (claim 1). Additionally, the detergent surfactant consists essentially of mixtures of (i) at least about 4% of nonionic surfactants selected from the group consisting of polyhydroxy fatty acid amides, and (ii) anionic surfactant selected from the group consisting of C_{8-22} alkyl ether sulfates.

Thus, the claims of Ofosu-Asante fail to teach or suggest a surfactant mixture as presently claimed containing both linear and branched alkyl alkoxy sulfate surfactant. Rather, the Ofosu-Asante claims are directed to surfactant mixtures of polyhydroxy fatty acid amide, alkyl ether sulfate and amine oxide. Moreover, the Ofosu-Asante claims fail to teach or suggest a surfactant mixture containing both linear and branched alkyl alkoxy sulfate surfactant wherein from 20% to 60% by weight of the sulfate surfactant comprises the branched component as required by present claim 12. As discussed in detail above, both Surutzidis and Ofosu-Asante similarly fail to teach or suggest such a surfactant mixture.

The difference between the linear and branched architecture of the AAS with respect to improving the stability of high-sudsing detergents goes to the very heart of the instant invention, i.e, Applicants have discovered that certain architectural proportions confer a stability heretofore unrecognized in the art. The failure of either Ofosu or Surutzidis to suggest a combination of the branched and linear AAS's and amine oxide surfactant, or the resulting improvement in stability, highlights the nonobvious and patentable distinctions of the present inventive compositions over the combination of Ofosu in view of Surutzidis.

Since these references, alone or in combination, fail to disclose an important requisite element of the present inventive compositions, the present invention is not rendered obvious by the Ofosu-Asante claims in view of Surutzidis. Specifically, the combination fails to teach compositions comprising both linear and branched AAS's in specified proportions, particularly in combination with amine oxide and magnesium ions. Hence, the present inventive compositions are not rendered obvious by the asserted combination. The rejection of claims 12-15, 17 and 18 under the nonstatutory doctrine of obviousness-type double patenting should therefore be reversed.

3. Claims 14 and 15 are Further Patentably Distinguishable

Claims 14 and 15 further define the alkyl alkoxy sulfate surfactant which is employed in the aqueous liquid detergent composition of claim 12 as comprising from 20% to 55% by weight of the branched alkyl alkoxy sulfate surfactant (claim 14), or as comprising from 30% to 50% by weight of the branched alkyl alkoxy sulfate surfactant (claim 15).

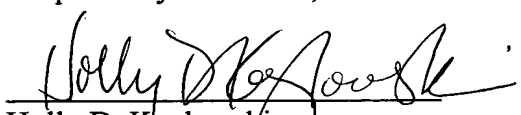
The Ofosu-Asante claims fail to teach or suggest such compositions, and, particularly fail to teach such a combination of surfactants. Moreover, while Surutzidis discloses that their compositions may contain a branched alkyl alkoxy sulfate compound, Appellants find no teaching or suggestion regarding a composition containing a surfactant mixture of alkyl alkoxy sulfate surfactant and amine oxide surfactant wherein the alkyl alkoxy sulfate surfactant contains both branched and linear alkyl alkoxy sulfate surfactant, and particularly from 20% to 50% by weight branched alkyl alkoxylated sulfate surfactant as required by claim 14 or contains from 30% to 50% by weight of branched alkyl alkoxy sulfate surfactant as required claim 15. The Board's attention is again directed to the discussion in the present specification at page 5 which emphasizes the importance of the claimed range of branched alkyl alkoxylated sulfate material in providing desired low temperature stability in combination with good sudsing performance, which is an important consumer perceived indication of efficacy. Not only do Surutzidis and Ofosu-Asante fail to teach or suggest the limitations of claims 14 and 15, Appellants find no teaching or suggestion in these references relating to the improvement in low temperature stability provided without sacrificing sudsing ability, provided by the claimed compositions. Finally, Surutzidis teaches away from the compositions as claimed in the exemplary compositions set forth at page 10 wherein alkyl alkoxy sulfate surfactant containing 100% branching is employed (Example E). As noted above, it is error to find obviousness where the prior art diverges from and teaches away from the invention at hand, *In re Fine, supra*.

It is therefore submitted that the compositions defined by claims 14 and 15 are nonobvious over and patentably distinguishable from the combination of Surutzidis and Ofosu-Asante, whereby the rejection under 35 U.S.C. §103 should be reversed.

IV. CONCLUSIONS

For the reasons set forth in detail above, the aqueous liquid detergent compositions defined by claims 12-15, 17 and 18 and the methods of washing soiled dishes defined by claims 19 and 20 are nonobvious over and patentably distinguishable from the combination of Surutzidis in view of Ofosu-Asante. Accordingly, this rejection should be reversed. Additonally, the aqueous liquid detergent compositions defined by claims 12-15, 17 and 18 are nonobvious over and patentably distinguishable from the Ofosu-Asante claims, even in view of Surutzidis, whereby the rejection under the judicially created doctrine of obviousness-type double patenting should be reversed. Favorable action by the Board is respectfully requested.

Respectfully submitted,



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APPENDIX

12. An aqueous liquid detergent composition comprising from 30% to 70% by weight of the total composition of water, from 0.1% to 2% by weight of the total composition of magnesium ions, and a surfactant mixture comprising:

a) an alkyl alkoxy sulfate surfactant of the formula $R_1O(A)_xSO_3M$, where R_1 is an alkyl or alkenyl group having 9 to 16 carbon atoms, A is an alkoxy group, x represents 0.5 to 3 in average, and M is a member selected from the group consisting of alkali metals, alkali earth metals, ammonium and alkanolammonium, wherein from 20% to 60% by weight of the total alkyl alkoxy sulfate comprises an alkyl alkoxy sulfate wherein R_1 is branched such that the composition provides sudsing; and

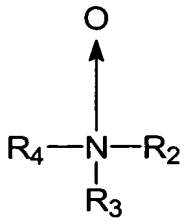
b) 0.5 to 10% of an amine oxide surfactant.

13. A composition according to claim 12 which comprises from 40% to 60% by weight water.

14. A composition according to claim 12 wherein said alkyl alkoxy sulfate surfactant comprises from 20% to 55%, by weight, of said branched alkyl alkoxy sulfate surfactant.

15. A composition according to claim 14 wherein said alkyl alkoxy sulfate surfactant comprises from 30% to 50%, by weight, of said branched alkyl alkoxy sulfate surfactant.

17. A composition according to Claim 12 wherein said amine oxide surfactant is of the formula:



wherein R_2 represents a straight or branched alkyl or alkenyl group having 10 to 16 carbon atoms, and R_3 and R_4 each represent a C_1 to C_4 hydrocarbon chain.

18. A composition according to Claim 12 which is a clear liquid packaged in a transparent container.

19. A method of washing soiled dishes comprising diluting a composition according to Claim 12 in water, and immersing the soiled dishes in the diluted composition and contacting the soiled dishes, in the presence of the diluted composition, with a washing article such that the soiled dishes are cleaned.

20. A method of washing soiled dishes comprising immersing the soiled dishes into a water bath, absorbing an effective amount of a composition according to Claim 12 onto a device, and contacting each of the soiled dishes with the device such that the soiled dishes are cleaned.